

## CURRENT LITERATURE.

*Notes on some Species in the third and eleventh centuries of Ellis' North American Fungi*, by W. G. Farlow. From Proc. Amer. Acad., XVIII, pp. 65-85.

This article is prefaced by an extended discussion on the proper selection of a name for the species where several stages or forms have been described as belonging to separate genera. To conform as nearly as possible to the general usage of systematists, it seems necessary to adopt the oldest specific name without regard to the stage for which it was used. This is tacitly admitted by the author who objects, however, to applying the rule to Uredineous plants, owing to the difficulty of identifying with certainty many forms named by the older mycologists. He therefore advocates the suppression of all æcidial names and of such uredo names as are of doubtful identity, thus confining the selection of the name to the teleutosporic forms and the unquestionable uredo forms. This is a commendable method on the score of accuracy, but it is to be feared will eventually fail of success owing to the tendency to revert to the more general usage, particularly as it is already adopted by Winter, the author of the most important contribution to the systematic treatment of *Uredineæ*, and other eminent German writers. The period of confusion in nomenclature should be passed as soon as possible, and an important factor in securing this end is uniformity of methods.

After giving a caution regarding the hasty grouping of æcidial forms with the supposed teleutosporic stages, the author proceeds to the annotation of nearly a fourth of the species of the two centuries. No. 1003 gives an *Æcidium* on *Anemone nemorosa* and on *Ranunculus abortivus* under the name of *Æ. Ranunculacearum* DC., both of which Dr. Farlow inclines to think distinct from the true *Æ. Ranunculacearum*. No. 277-8 *Civoma luminatum* is referred to at length, and the suggestion made that it may be the æcidial stage of some *Phragmidium*. Nos. 247 and 248 are the forms of rust on *Rhus* known respectively as *Pileolaria brevipes* with depressed spores, which the Doctor holds to be the uredo form, and *Uredo Toxicodendri* with spirally marked ovate spores which he considers the teleutosporic form, although Winter has reversed them. These, he thinks, should not be separated from the genus *Uromyces*, and that the name to be adopted is *Urom. Toxicodendri* Berk. & Rav. No. 239, the *Uromyces* on *Spartina stricta*, described in Bulletin of Bussey Inst. II, 243, as a variety of *U. Junci*, is erected to a species and described as *Urom. Spartinae*, Farlow. It has yet only been found at Wood's Holl, Mass. No. 240 is *Urom. Peckianus*, Farlow, on *Brizopyrum spicatum*, of which a description is given. It is closely related to *U. Dactylidii*, and ranges from Mass. to N. Jer. No. 1067 is a new species of *Uromyces* on *Melanthera hastata*, from Florida, of which a description is given as *Urom. Martinii* Farlow. No. 1068 was issued as the æcidial form of the last species under the same name, but as it is found to follow instead of precede the teleutosporic form, the assumption is considered hasty. No. 253, *Puccinia Lobeliv*, Gerard, has priority, and is to be substituted as the name for *P. microsperma*, erroneously printed *P. microspora*. No. 257, *Puccinia aculeata*, should be superceded by *P. Podophylli*, Schw., an earlier name. No. 260, the *Puccinia* on *Proserpinaca*, is described as a distinct species, *P. Proserpinacæ*, Farlow, with the reservation that it may prove, upon examination, to be the same as that described by Vize, from California. The species is probably wide-spread, as it has been collected in Iowa. No. 1029, *Puccinia emaculata*, Schw., on *Panicum capillare*, is described. It is a species whose name has been a matter of uncertainty for a long time, being most often called *P. Graminis* var. *brevicarpa*, Peck, but the examination of Schweinitzian specimens now puts the matter at rest. No. 1051, the strange *Puccinia* on *Bouteloua curtipendula*, is not characterized, although the new name, *P. versans*, Farlow, is used for it. It is so intimately associated with *Uromyces Brandegei* that the two occur in the same sorus, and the spores of the *Uromyces* resemble the single-celled spores of the *Puccinia* in all

respects, except that the former are papillate. Of course there is much probability that the two are variations of one species, as Dr. Farlow is inclined to think, although we prefer to keep them separate till more evidence is adduced, and do not see that the occurrence of the two forms of spores in the same sorus is a necessary proof of their genetic connection. No mention is made of the uredo on *Bouteloua* found in Iowa and described in the article on Iowa *Uromyces* in the Bull. Minn. Acad. Sci., vol. 2, which, although described as part of the *Uromyces*, may belong to either or both forms. So perplexing a case has not before appeared. No. 1052, *Puccinia Lantaneæ* Farlow, from Bermuda, is described. This also has single-celled telentospores.

*The Grasses of the United States*, being a synopsis of the Tribes and Genera, with descriptions of the genera, and a list of the species. By Dr. George Vasey, Botanist of the Department of Agriculture. Special Report—No. 63.

This, for the first time, gets together all our grasses, that we may look them in the face, and a goodly array they are, with 114 genera and 589 species. The author has long made a special study of the grasses, and this pamphlet is the result of much careful work and the promise of a work hereafter which will include specific descriptions. The object of the report seems to be specially to give those west of the Mississippi river a chance to name their grasses, and a commendable object it is, too, for botanists at the east have no conception of the "lost feeling" of the ordinary western botanist with all the botany of his region shut up in publications which are inaccessible to him. In this pamphlet the synopsis of the tribes and genera is chiefly a translation from Bentham and Hooker. Our large genera are as follows: *Panicum* 52 species, *Poa* 34, *Sporobolus* 26, *Paspalum*, *Aristida*, and *Muhlenbergia* each 23, *Stipa*, *Deyeuxia* (*Calamagrostis*) and *Eragrostis* each 20. Those genera with 10 species or more begin with *Agrostis* and *Bromus* each with 19, and then in order *Festuca*, *Andropogon*, *Bouteloua*, *Glyceria*, *Melica*, *Elymus*, and *Triodia*, under which last name it is hard to recognize *Tricuspis*. Of these species we note the author's name appended to no less than 30, six of which are in the genus *Poa*. It is yet hard to accustom ourselves to recognize *Deyeuxia* as our old *Calamagrostis*, or *Deschampsia* as the larger part of *Aira*, or *Agropyrum* as *Triticum* in part, or *Asprella* as *Gymnostichum*. It is a great pity that the government is so niggardly in the printing of such a pamphlet, for the typography and general "make-up" are very far from being what such work deserves. We understand that copies may be had upon application to Dr. Vasey.

*Contributions to American Botany*. XI. By Sereno Watson. I. List of Plants from S. W. Texas and N. Mexico, collected chiefly by Dr. E. Palmer, in 1879-80 (Gamopetalæ to Acotyledones). II. Descriptions of some new western species. Proc. Am. Acad. XVIII.

These annual contributions from the Botanic Gardens at Cambridge are always looked for with the greatest interest as containing the latest utterances of those who are best situated in this country to express an opinion in systematic botany. The principal part of the present contribution is devoted to a very interesting region, whose flora is comparatively unknown, and certainly very unusual. S. W. Texas and N. Mexico really share in that peculiar flora which has its beginning in S. Idaho, stretches through the Great Basin to Arizona and New Mexico, and so on to Texas and Mexico. Nearly fifty new species are described from Dr. Palmer's collection, and two new genera proposed. They both belong to the *Liliaceæ* and are named *Glyphosperma* and *Hemiphyllus*. The former belongs to Bentham's subtribe *Anthericeæ* and is "remarkable for the large colored stigmas, the peculiar filaments, the short dorsified anthers, the 1-nerved perianth segments, the pitted rugose seeds, and the terete fistulous leaves." The latter is intermediate between the *Chlorogaleæ* and the *Anthericeæ*, and is "characterized especially by the adnate filaments, only the inner and shorter ones antheriferous, and the scarious 1-nerved perianth-segments, in connection with the tuberous roots." Both were found near Saltillo. A synopsis

is also given of the genera and species of *Commelinaceæ* in the U. S., *Commelina* containing 5 species, *Tradescantia* 5, and *Tinantia* 1. The changes are that *C. Cuyennensis* Rich. and *C. communis* of Chapman, become *C. nudiflora*, L.; *C. erecta* of Gray and Chapman is *C. hirtella*, Vahl., while *C. erecta*, L. still ranges from Penn. to Fla. An arrangement of the species of *Bouteloua* is also given, the 25 species being arranged under 4 sections, as proposed by Bentham. These sections are *Chondrosium* with 10 species, *Atheropogon* with 10; *Triathera* with 2, and *Polyodon* with 3. *B. Burkei*, Scribner, *B. Harvardi*, Vasey, and *B. Texana*, Watson, are three species proposed as new. *B. curtispindula*, Torr. becomes *B. racemosa*, Lag. The Ferns are described by Prof. Eaton and among them are two new species of *Cheilanthes*. The Mosses were determined by the late Thos. P. James, and the very few lower cryptogams by Prof. Farlow.

In the second part, which occupies but five pages, are descriptions of some new western species, 19 in number, from Texas, New Mexico, Arizona, California and up the coast to Washington Territory.

*Nouvelles Remarques sur la Nomenclature Botanique*, par M. Alph. De Candolle. Genève, 1883.

This pamphlet of 80 pages contains discussions of subjects which have arisen since the author's publication, in 1867, of the "Lois de la nomenclature botanique," especial attention being devoted to Dall's report on "Nomenclature," etc., to the Nashville meeting of the A. A. A. S., in 1877; the report of M. Douville of the Geological Congress at Bologna, in 1881, upon the same subject; and the rules proposed by M. Chaper to the Zoölogical Society of France, in 1881.

The first part contains some observations and discussions upon various articles in the laws of 1867, the most important of which are concerning the point of departure for the law of priority, the citation of authors' names, both of species edited and inedited, and the names to be rejected or modified, and those which should be retained in spite of some defects.

The second part deals with new questions or those concerning which the Congress of 1867 was not specific, such as the nomenclature of organs, of fossils, of inferior groups or varieties, the use of capitals in the specific name.

The third and last part contains the text of the laws in full as adopted by the Congress, and indicates the proposed changes.

## ARTICLES IN JOURNALS

- ELLIS, J. B. & B. M. EVERHART.—New species of Fungi (6 species), *Torr. Bull.* 10. 76.  
 FARLOW, W. G.—Notes on some species in the third and eleventh centuries of Ellis' N. Am. Fungi, *Proc. Am. Acad.* 18. 65.  
 GRATACAP, L. P.—The growth of plants in acid solutions, I, *Am. Nat.* 17. 970.  
 GRAY, ASA.—Genera Plantarum by Bentham and Hooker (notice of the completion of the work), *Nation*, July 19, 1883; *Am. Jour. Sci.* 3. 26. 245.  
 GRAY, ASA and J. H. TRUMBULL.—Review of De Candolle's Origin of Cultivated Plants, with Annotations upon certain American Species (concluded from page 255 of Vol. XXV.), *Am. Jour. Sci.* 3. 26. 128.  
 HILL, E. J.—Means of Plant Dispersion, *Am. Nat.* 17. 811.  
 HOOPES, JOSIAH—Pinus Koraiensis, *Proc. Philad. Acad.* 1883. 114.  
 JONES, MARCUS E.—New plants from California, Nevada, etc., (6 species), *Am. Nat.* 17. 875 and 973.  
 MEEHAN, THOS.—Contraction of Vegetable Tissues under Frost, *Proc. Philad. Acad.* 1883. 74.  
 MEYER, A.—Review of his "Ueber Chlorophyll Körner, Stärkekörper und Farbkörper," by H. Marshall Ward, *Nature*, 28. 267.  
 MOHR, CHAS.—On Quercus Durandii, Buckley, *Proc. Philad. Acad.* 1883. 37.  
 NEWBERRY, J. S.—Notes on some Fossil Plants from Northern China, *Am. Jour. Sci.* 26. 123.  
 PECK, CHAS. H.—New species of Fungi (11 species), with plate, *Torr. Bull.* 10. 73.  
 SCHIMPER, A. W. F.—Review of his "Ueber die Entwicklung der Chlorophyllkörner und Farbkörper" by H. Marshall Ward, *Nature*, 28. 267.  
 SCRIBNER, F. LAMSON.—List of Grasses from Wash. Terr. (1 new species, *Glyceria Canbyi*), *Torr. Bull.* 10. 77.  
 TRASK, J. D.—Cases of Mushroom Poisoning, *Am. Jour. Med. Sci.* April, 1883.  
 TRUMBULL, J. HAMMOND.—See under GRAY above.  
 WATSON, SERENO.—Contributions to N. Am. Botany, XI (60 new species), *Proc. Am. Acad.* 18. 96.  
 WITROCK, W. B.—Review of his "Snow and Ice Flora," by Mary P. Merrifield, *Nature*, 23. 1304.